California Environmental Protection Agency	DEUTZ AG	EXECUTIVE ORDER U-R-013-0227-2 New Off-Road
		Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

**IT IS ORDERED AND RESOLVED:** That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)					
2007	7DZXL04.1069	4.038	Diesel	8000					
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION						
Direct Die (some mo	sel Injection, Turbocharg odels), Electronic Control Limiter, Exhaust Gas Re	Module, Smoke Puff	Loader, Tractor, Dozer, Pump, Compressor, Other Industria Equipment						

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

	EMISSION			E	EXHAUST (g/kw-l	OPACITY (%)				
POWER CLASS			нс	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
56 <u>&lt;</u> kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT			4.4	0.7	0.09	12	4	22

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

## This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

This Executive Order hereby supersedes Executive Order U-R-013-0227-1 dated October 15, 2007.

Executed at El Monte, California on this \_\_\_\_\_ day of November 2007.

Annette Hebert, Chief Mobile Source Operations Division

**Engine Model Summary Form** 

N-2-013-0227-2

Manufacturer: DEUTZ AG Engine category: Nonroad Cl

Attachment

ory: Nonroad Cl

7DZXL04.1069 EPA Engine Family:

Mfr Family Name: TCD2012L04 2V MECH 37-75KW TIER3

Process Code: New Submission

ł	ZN EGC	-				V. et al. a date			<b></b>												** **	
9.Emission Control Device Per SAE J1930	DDI, TC, CAC, SPL ECN EGO	DDI, TC, CAC, SPL	DDI, TC, SPL	DDI, TC, SPL	DDI, TC, SPL	DDI, TC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, SPL	DDI, TC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL			
8.Fuel Rate: (lbs/hr)@peak torque	30.9	31.9	29.1	31.6	33.0	33.7	33.7	33.7	33.7	33.7	32.3	32.3	32.3	32.3	32.3	30.9	30.9	30.9	30.9	29.1	29.1	29.1
mm/stroke@peak torque	87	06	82	89	93	<b>3</b> 2	95	95	95	95	91	91	91	91	91	87	87	87	87	82	82	82
6.Torque @ RPM (SEA Gross)	281.7@1600	293.6@1600	267.7@1600	289.1@1600	302.6@1600	309.7@1600	309.7@1600	309.7@1600	309.7@1600	309.7@1600	295.0@1600	295.0@1600	295.0@1600	295.0@1600	295.0@1600	280.3@1600	280.3@1600	280.3@1600	280.3@1600	265.5@1600	265.5@1600	265.5@1600
(lbs/hr) @ peak HP (for diesels only)	39.8	39.8	33.2	38.6	38.6	40.5	39.8	38.6	38.2	38.6	40.5	39.8	38.6	38.2	38,6	40,5	36.7	37.1	35.1	34.2	29.7	33.2
mm/stroke @ peak HP (for diesel only)	78	78		62	52	76	78	79	82	87	76	78	79	82	87	76	72	76	79	70	67	68
3.BHP@RPM (SAE Gross)	97.8@2300	100.4@2300	88.7@2200	100.4@2200	100.4@2200	100.4@2400	100.4@2300	100.4@2200	100.4@2100	100.4@2000	100.4@2400	100.4@2300	100.4@2200	100.4@2100	100.4@2000	100.4@2400	96.5@2300	96.5@2200	93.8@2000	93.8@2200	89.8@2000	91.1@2200
2.Engine Model	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V
1.Engine Code	C3MT73	C3MT75	C3MT66	C3MT75A	C3MT75B	C3MI74	C3MI74A	C3MI74B	C3MI74C	C3MI74D	C3MI74E	C3MI74F	C3MI74G	C3MI74H	C3MI74J	C3MI74K	C3MI72	C3MI72A	C3MI70	C3MI70A	C3MI67	C3M168